

periodic. The influence of wind on the tension of the air in the Observatory on Mount Washington was incidentally found to affect the barometer seriously, and even to vitiate its record. Next he describes the devices for the elimination of hypsometric errors, or for diminishing them. The "new solution" is then explained in detail and compared with other methods. Possible improvements are suggested, and some circumstances under which it is not available are carefully stated.

Eight plates of very complete and distinct diagrams illustrate altitude-determinations, with their periodic and other variations; and several useful woodcuts also help to elucidate the author's views and observations.

The mass of valuable information collected in this well-illustrated volume, put together by first-class geologists, at the cost of the liberal United States Government, and freely circulated also at its expense, is welcome to geologists and others all over the world; and we cordially recognize the heartiness of work it exhibits and the liberality with which it is distributed.

MISCELLANEOUS.

On Floral Polymorphism in Narcissus reflexus. By M. L. CRIÉ.

I HAVE the honour to indicate to the Academy a new instance of floral polymorphism in the *Narcissus* of the Glénans (Finistère). This plant, which is very rare and little known to botanists, forms part of that Breton centre of vegetation that I have characterized by *Eryngium viviparum*, *Omphalodes littoralis*, and *Linaria arenaria*.

The Glénans *Narcissus*, of which I was able to collect some hundreds of flowering specimens towards the end of April this year, appears in the island under three forms, which are very unequal in number. The first two differ in the length of the pistil and stamens.

In one the style, which is much shorter than the six stamens, raises its stigma a little way above the constriction formed by the base of the tube of the perianth. The three stamens of the inner row are shorter than the three of the outer row; it is the brachystylate form.

In the other, the style, longer than the six stamens, raises its stigma above even the three stamens of the outer row, which are the longest and the first formed (A. Chatin). This is the dolichostylate form.

This remarkable floral polymorphism in *Narcissus reflexus* has escaped the notice of Loiseleur and other botanists, who have simply indicated in this plant the difference of length which exists between

the six stamens:—"Stamina 3 longiora et 3 alterna breviora" (Lois. Flora Gallica).

But there also exists at the Glénans a third form much more rare than the preceding—a form with the andrœcium triandrous, in consequence of the abortion of the three stamens of the inner row. In certain dolichostylate flowers we notice that the three inner stamens, hidden at the bottom of the tube, are nearly sessile upon the perianth; in others the anthers become completely aborted and the flower becomes triandrous.

Narcissus reflexus, Lois., therefore presents, at the Glénans, three remarkable forms:—(1) a form with a long style and with shorter stamens (dolichostylate form); (2) a form with a short style and with longer stamens (brachystylate form); (3) a triandrous form, produced by the abortion of the three inner stamens. This *Narcissus* with a triandrous andrœcium directly connects the Amaryllideæ with the Irideæ, which are only Amaryllideæ with *three extrorse stamens*. But by its *triandrous andrœcium and its introrse stamens* the *Narcissus reflexus* still more directly unites the Amaryllideæ with the Hæmodoraceæ through certain genera which, like *Dilotris*, *Lachnanthes*, and *Phlebocarya*, possess three introrse stamens and a perfectly inferior ovary.—*Comptes Rendus*, June 30, 1884, p. 1600.

Anatomy of Epeïra. By M. VLADIMIR SCHIMKEWITSCH.

M. Schimkewitsch has published, in the 'Annales des Sciences Naturelles,' a most important paper, accompanied by eight plates, upon the anatomy of *Epeïra*. The conclusions resulting from his investigations he sums up as follows:—

1. It is possible to establish the homology which exists between the appendages and the various parts of the body of the Arachnida and those of the other Arthropoda (Myriopoda and Insecta, Crustacea and Limulidæ).

2. The Arachnida, placed between the Tracheata and the Limulidæ on the one hand, and the Crustacea on the other, are destitute of antennæ.

3. Their mode of development, as well as the structure of their organs of digestion, respiration, and vision, approximate them to the Myriopoda and the larvæ of insects.

4. On the contrary, by their circulatory apparatus and their muscular system, the higher Arachnida approach the Limulidæ; but this resemblance may be explained by the identity that exists in the general configuration of the body in these two forms; for the Limulidæ, according to their evolution (Nauplius-stage and Trilobite-stage), and according to the constitution of the respiratory apparatus, are true Crustacea destitute of antennæ.